

WHAT IS CLAIMED IS:

1. An optoelectronic apparatus, comprising:
 - a first package comprising a first window, said first package to house a device to perform a first optoelectronic function; and
 - a second package comprising a second window, said second package to house a device to perform a second optoelectronic function;
 - said first package attached to said second package to allow a light beam to pass between said first window and said second window.
2. The optoelectronic apparatus as recited in claim 1, wherein either of said first window and said second window comprise a transparent material to form a hermetic package.
3. The optoelectronic apparatus as recited in claim 1 wherein either of said first window and said second window comprise an opening.
4. The optoelectronic apparatus as recited in claim 1 wherein said second package comprises a third window to couple with a third package.
5. The optoelectronic apparatus, as recited in claim 1 wherein said second package comprises a feedthrough for a fiber.

6. The optoelectronic apparatus as recited in claim 1 wherein said device comprises a passive device.

7. The optoelectronic apparatus as recited in claim 6 wherein said passive device comprises one of a mirror and a splitter.

8. The electronic apparatus as recited in claim 1 wherein said device comprises an active device.

9. The electronic apparatus as recited in claim 8 wherein said active device comprises one of a laser, and amplifier, a modulator, and an optical isolator.

10. A method, comprising:

providing a plurality of packages each housing a device for performing an optoelectronic function;

providing at least one window in each of said packages;

coupling said plurality of packages together; and

transmitting a beam between windows of adjacent packages.

11. The method as recited in claim 10, further comprising:

one of soldering, welding or epoxying said plurality of packages together.

12. The method as recited in claim 10, further comprising:

providing a package comprising a feedthrough for a fiber.

13. The method as recited in claim 10 wherein said device comprises a passive device.

14. The method as recited in claim 13 wherein said passive device comprises one of a mirror and a splitter.

15. The method as recited in claim 10 wherein said device comprises an active device.

16. The method as recited in claim 15 wherein said active device comprises one of a laser, an amplifier, a modulator, and an optical isolator.

17. A modular optoelectronic system, comprising:

a plurality of hermetically sealed packages, each comprising at least one window;

a device in each of said plurality of packages to perform a particular function for an optoelectronic product;

coupling means for coupling ones of said packages together to pass a collimated beam between adjacent windows to optically connect each said device to form said optoelectronic product.

18. The modular optoelectronic system as recited in claim 17, further comprising:

a package including a fiber feedthrough.

19. The modular optoelectronic system as recited in claim 17 wherein each said

device comprises one of a passive device and an active device.

20. The modular optoelectronic system as recited in claim 17 wherein said

coupling means comprises one of solder, weld, and epoxy.